25 705 700 PATENT OKT. NO. 330213-02500 CUSTOMER NO. 27160

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: BENGS et al.

Application No.: 09/869,395 Group Art Unit: 1615

Filed: October 1, 2001 Examiner: Todd D. Ware

For: ORAL HYGIENE PRODUCT CONTAINING

SPHERICAL MICROPARTICLES ON THE BASIS OF LINEAR WATER-INSOLUBLE

POLYGLUCANS

Attorney Docket No. 330213.02500

DECLARATION UNDER 37 C.F.R. §1.132

Commissioner for Patents Washington, DC 20231 Sir:

- I, Dr. Stephan Hausmanns, do hereby make the following declaration:
- 1. I've got a Master Degree (German "Diplom") in Chemistry and a PhD in Food Biotechnology from the University Bonn. Since more than 10 years, I'm working in the area of Food Technology.
- I was the scientific manager of Celanese Ventures GmbH in charge of the research project that led to the invention disclosed and claimed in the above-identified application since December 2003. In Dec. 2003 the research project was divested to a third company. The inventors (Bengs *et* al.) of the above-identified application have since left the Celanese Ventures GmbH and are not presently available to make this Declaration Under 37 C.F.R. Section 1.132 (Declaration). Accordingly, as I am the individual most familiar with the above-identified application and the pending claims, I submit this

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Declaration in *lieu* of the inventors. I have reviewed the Final Office Action dated August 26, 2003 (Paper No. 10) and the rejection of the pending claims therein;

- 3. It is my understanding that the pending claims, claims 13-25 have been rejected under 25 U.S.C. Section 103 as allegedly being obvious over Haywood et al. (WO 95/34275, hereinafter '275), in combination with Voet and Voet (Biochemistry, John Wiley and Sons, 1990), and further in view of Kossman (WO 95/31553; hereinafter, "553"). In short, the Examiner appears to be of the opinion that it would have allegedly been obvious to one of ordinary skill in the art at the time of the invention to substitute the polyglucans of '553, or any polyglucans having similar properties into the formulation of '275 in order to impart a beneficial effect. It is my further understanding that in making the above rejection against the pending claims, the Examiner has indicated that the United States Patent and Trademark Office does not have the facilities for examining and comparing applicant's product with the product of the prior art in order to establish that the product of the prior art does not possess the same material structural and functional characteristics of the claimed product. It is my further understanding that the Examiner has indicated that in the absence of evidence to the contrary, the burden is allegedly upon the applicant to prove that the claimed products are functionally different than those taught by the prior art and to establish patentable differences;
- 4. For the reasons below, I respectfully assert that it would not have been obvious to one of ordinary skill in the art to substitute the polyglucans of '553, or any polyglucans having similar properties into the formulation of '275 in order to impart a beneficial effect because the polyglucans contained within the '553 and the '275 are indeed

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patentably and functionally distinct from the poly-α-glucan, poly-1,3-β-glucan, or mixtures thereof, as claimed in the present application, as amended. Moreover, the reference of Voet and Voet does not remedy the deficiencies of the '553 and the '275 references;

- 5. In particular, the oral hygiene composition comprising cellulose spherical particles of Haywood is a poly-1,4-β-glucan. In contrast, the novel microparticles of the present invention as claimed, are comprised of at least one water-insoluble unbranched poly-α-glucan, poly-1,3-β-glucan, or mixtures thereof. I wish to stress that there is no poly-1,4-β-glucan present whatsoever in the microparticle oral hygiene composition of the presently claimed invention. Furthermore, I have reviewed the secondary reference of Voet and Voet which I understant is merely cited and relied upon by the Office Action to demonstrate that the poly-1,4-β-glucan of Haywood's cellulose particles is water-insoluble and unbranched. There is no teaching or suggestion in the reference of Voet and Voet of the novel microparticle oral hygiene composition of the present invention as claimed, comprised of at least one water-insoluble unbranched poly-α-glucan, poly-1,3-β-glucan, or mixtures thereof. Accordingly, I believe that the novel microparticle oral hygiene composition of the present invention as claimed, comprised of at least one water-insoluble unbranched poly-α-glucan, poly-1,3-β-glucan, or mixtures thereof, are therefore neither taught nor suggested by Haywood, when taken either alone or in view of the secondary reference of Voet and Voet.
- 6. I also understand from the Office Action that the pending claims have been rejected as being allegedly obvious over the reference of Kossman, taken either alone or in combination with Voet and Voet and Haywood. I have carefully reviewed the reference

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of Kossman and I respectfully submit that, contrary to the position of the Office Action, Kossman does not teach or suggest that alpha-1,4-glucan has the same properties as cellulose, nor does it teach or suggest the novel microparticles of the present invention as claimed comprising at least one water-insoluble unbranched poly- α -glucan, poly-1,3- β -glucan, or mixtures thereof.

7. In particular, I believe that, at most, the Kossman reference only teaches that "[O]ne has succeeded in producing fibers from amylose whose properties are similar to those of natural cellulose fibers and which allow to partially or even completely replace them in the production of paper" (emphasis added). I believe that in view of this teaching alone, one skilled in the art is not taught by this quoted passage from Kossman that amylose (i.e., an alpha-1,4-glucan) itself has the same properties as cellulose (i.e., a poly-1,4-β-glucan). Rather, I believe that the Kossman reference is merely stating that it is possible to make fibers of amylose that have similar properties as fibers of cellulose. Clearly, one of ordinary skill in the art would know that this does not in any way teach or suggest that microparticles of amylose will have the same properties as microparticles of cellulose. Moreover, I believe that one of ordinary skill in the art would know that even if it is possible to make fibers of amylose that have similar properties as fibers of cellulose, Kossman merely indicates that it is these similar properties which allow to partially or even completely replace them in the production of paper. There is no teaching or suggestion to one of ordinary skill in the art in view of the references of Haywood, Voet and Voet and Kossman, taken either alone or in combination, to even consider using fibers of amylose in the microparticle oral hygiene composition of the present invention as claimed, which

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microparticles are comprised of at least one water-insoluble unbranched poly-α-glucan,

poly-1,3-β-glucan, or mixtures thereof.

8. In conclusion, I believe that in view of my Declaration the secondary

reference of Kossman does not cure the deficiencies of the primary references of

Haywood, taken either alone or in combination with Voet and Voet. Accordingly, I

believe that rejection of Claims 13-25 as being allegedly obvious under 35 U.S.C. § 103(a)

over the combination of cited references is improper and that the rejection should be

withdrawn.

9. I further declare that all statements made herein of my own knowledge are

true and that all statements made on information and belief are believed to be true, and

further, that these statements were made with the knowledge that willful false statements

and the like so made are punishable by fine or imprisonment, or both, under Section 1001

of Title 18 of the United States Code, and that such willful false statements may

jeopardize the validity of the application or any patent issuing thereon.

Dated: 13.04.04

Dr. Stephan Hausmanns

Doc #:WAS01 (330213-02500) 41533297v1;03/01/2004/Time:15:30